Advanced Clinical Technologies in Treating Neurosurgical Diseases

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Message from the Guest Editors

Advanced clinical technologies have profoundly reshaped the landscape of neurosurgical treatment, offering enhanced precision in diagnostics, minimally invasive procedures, and improved patient outcomes. Several pivotal technologies play crucial roles in modern neurosurgery:

1. Focused ultrasound technology
2. Exoscopes
3. Robotic-assisted surgery
4. Virtual reality and augmented reality technologies
5. Improved technology for neurosurgical education in brain and spine surgery: There is a need for new devices, such as simulators, to improve surgical training outside of the operating theatre.
6. Digitalized operating theaters: Digital connections with radiological and clinical images
7. Intraoperative devices such as Neuronavigation, NMR, CT scan, O and C arms, 5-ala, and fluorescine and their impact on patient outcomes
8. The role of serum biomarkers in improving the management of neurosurgical diseases
9. New techniques and new devices for cranial reconstruction

These advanced clinical technologies represent just a fraction of the rapidly evolving field of neurosurgical treatment. We highly welcome related papers.

Special Issue

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Message from the Editor-in-Chief

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